



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/910,009

Source: 8/1/2001

Date Processed by STIC: O/PE

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
 - 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
- FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/910,009

DATE: 08/01/2001
TIME: 15:38:10

Input Set : A:\2314-242.ST25.txt
Output Set: N:\CRF3\08012001\I910009.raw

*see
pp 52-4*
Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: University of Utah Research Foundation
 4 Cognetix, Inc.
 5 Olivera, Baldomero M.
 6 McIntosh, J. Michael
 7 Garrett, James E.
 8 Watkins, Maren
 9 Cruz, Lourdes J.
 10 Shon, Ki-Joon
 11 Jacobsen, Richard
 12 Jones, Robert M.
 13 Cartier, G. Edward
 14 Shen, Greg S.
 15 Wagstaff, John D.

17 <120> TITLE OF INVENTION: Mu-Conopeptides
 19 <130> FILE REFERENCE: 2314-242

OK>

21 <140> CURRENT APPLICATION NUMBER: US/09/910,009
 21 <141> CURRENT FILING DATE: 2001-07-23
 21 <150> PRIOR APPLICATION NUMBER: US 60/219,619
 22 <151> PRIOR FILING DATE: 2000-07-21
 24 <150> PRIOR APPLICATION NUMBER: US 60/245,157
 25 <151> PRIOR FILING DATE: 2000-11-03
 27 <150> PRIOR APPLICATION NUMBER: US 60/264,319
 28 <151> PRIOR FILING DATE: 2001-01-29
 30 <150> PRIOR APPLICATION NUMBER: US 60/277,270
 31 <151> PRIOR FILING DATE: 2001-03-21
 33 <160> NUMBER OF SEQ ID NOS: 520
 35 <170> SOFTWARE: PatentIn version 3.0
 37 <210> SEQ ID NO: 1
 38 <211> LENGTH: 280
 39 <212> TYPE: DNA
 40 <213> ORGANISM: Conus arenatus
 42 <400> SEQUENCE: 1

43 caagaaggat ccatcgact tcgtatgtc taaactggga gtcttcttgc ccatctgtat	60
45 gcttcgttt ccccttactg ctcttccgcgt ggatggggat caacctgcag accgacctgc	120
47 agagcgatgc caggacgact ttataactga gcattatccc ctgtttgatc ctgtcaaacg	180
49 gtgttgcgag aggccatgca acataggatg cgtaccttgt tgtaatgac cagctttgtc	240
51 atcgcggcct catcaagcga ataagtaaaa cgattgcagt	280

54 <210> SEQ ID NO: 2
 55 <211> LENGTH: 67
 56 <212> TYPE: PRT
 57 <213> ORGANISM: Conus arenatus
 59 <400> SEQUENCE: 2

61 Met Met Ser Lys Leu Gly Val Phe Leu Thr Ile Cys Met Leu Leu Phe	
62 1 5 10 15	
64 Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro	
65 20 25 30	
67 Ala Glu Arg Met Gln Asp Asp Phe Ile Thr Glu His His Pro Leu Phe	

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68 35 40 45
70 Asp Pro Val Lys Arg Cys Cys Glu Arg Pro Cys Asn Ile Gly Cys Val
71 50 55 60
73 Pro Cys Cys
74 65
76 <210> SEQ ID NO: 3
77 <211> LENGTH: 14
78 <212> TYPE: PRT
79 <213> ORGANISM: Conus arentus
81 <220> FEATURE:
82 <221> NAME/KEY: PEPTIDE
83 <222> LOCATION: (1)..(14)
84 <223> OTHER INFORMATION: Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue
5 an
85 d 12 is Pro or (Hy) ? what is this?
88 <400> SEQUENCE: 3
W--> 90 Cys Cys Xaa Arg Xaa Cys Asn Ile Gly Cys Val Xaa Cys Cys
91 1 5 10
93 <210> SEQ ID NO: 4
94 <211> LENGTH: 244
95 <212> TYPE: DNA
96 <213> ORGANISM: Conus atlanticus
98 <400> SEQUENCE: 4
99 ggatccatga tgtcttaact gggagtcttg ttgaccatct gtctgcttct gtttccactt 60
101 actgctcttc cgctggatga agatcaaccc gtacaccgac ctgcagagcg tatgcaggac 120
103 atttcatctg atcaacatct cttctttgat ctcataaac ggtgctgca gttgccatgc 180
105 gggccaggct tttgcgtccc ttgttgctga catcaataac gtgttgatga ccaactttct 240
107 cgag 244
110 <210> SEQ ID NO: 5
111 <211> LENGTH: 69
112 <212> TYPE: PRT
113 <213> ORGANISM: Conus atlanticus
115 <400> SEQUENCE: 5
117 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
118 1 5 10 15
120 Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Val His
121 20 25 30
123 Arg Pro Ala Glu Arg Met Gln Asp Ile Ser Ser Asp Gln His Leu Phe
124 35 40 45
126 Phe Asp Leu Ile Lys Arg Cys Cys Glu Leu Pro Cys Gly Pro Gly Phe
127 50 55 60
129 Cys Val Pro Cys Cys
130 65
132 <210> SEQ ID NO: 6
133 <211> LENGTH: 15
134 <212> TYPE: PRT
135 <213> ORGANISM: Conus atlanticus
137 <220> FEATURE:
138 <221> NAME/KEY: PEPTIDE
139 <222> LOCATION: (1)..(15)

RAW SEQUENCE LISTING
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140 <223> OTHER INFORMATION: Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue
5, 8
141 and 13 is Pro or Hy? ?

144 <400> SEQUENCE: 6

W--> 146 Cys Cys Xaa Leu Xaa Cys Gly Xaa Gly Phe Cys Val Xaa Cys Cys
147 1 - 5 10 15

149 <210> SEQ ID NO: 7

150 <211> LENGTH: 310

151 <212> TYPE: DNA

152 <213> ORGANISM: Conus aurisiacus

154 <400> SEQUENCE: 7

155 caagagggat cgatagcagt tcatgatgtc taaaactggga gtcttggta ccatctgttt	60
157 gcttcgttt ccccttactg ctcttccgtat ggatggagat caatctgttag accgacctga	120
159 agagcgtatg caggacgaca tttcatctga gcagcatccc ttgtttaatc agaaaagaat	180
161 gtgttgcggc gaaggccgga aatgccccag ctatttcaga aacagtccaga tttgtcattt	240
163 ttgttaaatg acaacgtgtc gatgaccaac ttcgttatca cgactaatga ataagtaaaa	300
165 cgattgcgt	310

168 <210> SEQ ID NO: 8

169 <211> LENGTH: 74

170 <212> TYPE: PRT

171 <213> ORGANISM: Conus aurisiacus

173 <400> SEQUENCE: 8

175 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe	
176 1 5 10 15	
178 Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Ser Val Asp Arg Pro	
179 20 25 30	
181 Glu Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Pro Leu Phe	
182 35 40 45	
184 Asn Gln Lys Arg Met Cys Cys Gly Glu Gly Arg Lys Cys Pro Ser Tyr	
185 50 55 60	
187 Phe Arg Asn Ser Gln Ile Cys His Cys Cys	
188 65 70	

190 <210> SEQ ID NO: 9

191 <211> LENGTH: 22

192 <212> TYPE: PRT

193 <213> ORGANISM: Conus aurisiacus

195 <220> FEATURE:

196 <221> NAME/KEY: PEPTIDE

197 <222> LOCATION: (1)..(22)

198 <223> OTHER INFORMATION: Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue
10 i
199 s Pro or Hyp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr,
200 di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr Tyr

203 <400> SEQUENCE: 9

W--> 205 Met Cys Cys Gly Xaa Gly Arg Lys Cys Xaa Ser Xaa Phe Arg Asn Ser
206 1 5 10 15

208 Gln Ile Cys His Cys Cys	
209 20	

211 <210> SEQ ID NO: 10

212 <211> LENGTH: 257

213 <212> TYPE: DNA

RAW SEQUENCE LISTING
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Input Set : A:\2314-242.ST25.txt
Output Set: N:\CRF3\08012001\I910009.raw

214 <213> ORGANISM: Conus aurisiacus
 216 <400> SEQUENCE: 10
 217 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtttgccttct gtttcccctt 60
 219 actgctttc cgatcgatgg agatcaatct gtagaccgac ctgcagagcg tatgcaggat 120
 221 gacatttcat ctgagcagca tcgcttgttc aatcagaaaa gaaggtgctg cccgtggcca 180
 223 tgcccccgac aaatcgacgg tgaatattgt ggctgttgcc ttggatgata accgttgtga 240
 225 tgaccaactt tctcgag 257
 228 <210> SEQ ID NO: 11
 229 <211> LENGTH: 75
 230 <212> TYPE: PRT
 231 <213> ORGANISM: Conus aurisiacus
 233 <400> SEQUENCE: 11
 235 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 236 1 5 10 15
 238 Leu Phe Pro Leu Thr Ala Leu Pro Ile Asp Gly Asp Gln Ser Val Asp
 239 20 25 30
 241 Arg Pro Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Arg
 242 35 40 45
 244 Leu Phe Asn Gln Lys Arg Arg Cys Cys Arg Trp Pro Cys Pro Arg Gln
 245 50 55 60
 247 Ile Asp Gly Glu Tyr Cys Gly Cys Cys Leu Gly
 248 65 70 75
 250 <210> SEQ ID NO: 12
 251 <211> LENGTH: 19
 252 <212> TYPE: PRT
 253 <213> ORGANISM: Conus aurisiacus
 255 <220> FEATURE:
 256 <221> NAME/KEY: PEPTIDE
 257 <222> LOCATION: (1)..(19)
 258 <223> OTHER INFORMATION: Xaa at residue 13 is Glu or gamma-carboxy Glu; Xaa at
 residue 3 a Arg is at location 3 *insert a space*
 259 nd 7 is Pro or Hyp; Xaa at residue 4 is Trp or Bromo Trp; Xaa at
 260 residue 14 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho
 261 -Tyr or O-phospho Ty *Tyr?*
 264 <400> SEQUENCE: 12
 W--> 266 Cys Cys Arg Xaa Xaa Cys Xaa Arg Gln Ile Asp Gly Xaa Xaa Cys Gly
 267 1 5 This Xaa 10 15
 269 Cys Cys Leu
 272 <210> SEQ ID NO: 13 *is hot released*
 273 <211> LENGTH: 262
 274 <212> TYPE: DNA
 275 <213> ORGANISM: Conus aurisiacus
 277 <400> SEQUENCE: 13
 278 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctacttct gtttcccctt 60
 280 actgctttc cgatggatgg agatcaacct gcagaccaac ctgcagatcg tatgcaggac 120
 282 gacatttcat ctgagcagta tcccttgttt gataagagac aaaagtgtt cactggaaag 180
 284 aagggtcat gtcggcaa agcatgcaaa aatctcaa at gttgctctgg acgataacgt 240
 286 gttgatgacc aacttctcg ag 262
 289 <210> SEQ ID NO: 14
 290 <211> LENGTH: 78

RAW SEQUENCE LISTING
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Input Set : A:\2314-242.ST25.txt
Output Set: N:\CRF3\08012001\I910009.raw

291 <212> TYPE: PRT
292 <213> ORGANISM: Conus aurisiacus
294 <400> SEQUENCE: 14
296 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
297 1 5 10 15
299 Leu Phe Pro Leu Thr Ala Phe Pro Met Asp Gly Asp Gln Pro Ala Asp
300 20 25 30
302 Gln Pro Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro
303 35 40 45
305 Leu Phe Asp Lys Arg Gln Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys
306 50 55 60
308 Ser Gly Lys Ala Cys Lys Asn Leu Lys Cys Cys Ser Gly Arg
309 65 70 75
311 <210> SEQ ID NO: 15
312 <211> LENGTH: 23
313 <212> TYPE: PRT
314 <213> ORGANISM: Conus aurisiacus
316 <220> FEATURE:
317 <221> NAME/KEY: PEPTIDE
318 <222> LOCATION: (1)..(23)
319 <223> OTHER INFORMATION: Xaa at residue 1 is Gln or pyro-Glu
322 <400> SEQUENCE: 15
324 Xaa Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
325 1 5 10 15
327 Lys Asn Leu Lys Cys Cys Ser
328 20
330 <210> SEQ ID NO: 16
331 <211> LENGTH: 232
332 <212> TYPE: DNA
333 <213> ORGANISM: Conus aurisiacus
335 <400> SEQUENCE: 16
336 ggatccatga tgtctaaact gggagtcttg ctgaccatct gtctgcttct gtttccactt 60
338 actgctgttc cgctgatgg agatcaacct ctagaccgac acgcggagcg tatgcatgtat 120
340 ggcatttcac ctaaacgcca tccctggttt gatcccgtca aacggtgttg caaggtgcaa 180
342 tgcgagttctt gcacccttg ttgctaacgt gttgatgacc aactttctcg ag 232
345 <210> SEQ ID NO: 17
346 <211> LENGTH: 68
347 <212> TYPE: PRT
348 <213> ORGANISM: Conus aurisiacus
350 <400> SEQUENCE: 17
352 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
353 1 5 10 15
355 Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Leu Asp
356 20 25 30
358 Arg His Ala Glu Arg Met His Asp Gly Ile Ser Pro Lys Arg His Pro
359 35 40 45
361 Trp Phe Asp Pro Val Lys Arg Cys Cys Lys Val Gln Cys Glu Ser Cys
362 50 55 60
364 Thr Pro Cys Cys

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/910,009

DATE: 08/01/2001
TIME: 15:38:11

Input Set : A:\2314-242.ST25.txt
Output Set: N:\CRF3\08012001\I910009.raw

L:21 M:270 C: Current Application Number differs, Replaced Current Application No
L:21 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:90 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:438 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:494 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:606 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:609 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:667 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:727 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:788 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:851 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42
L:911 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:914 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:974 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48
L:1037 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51
L:1093 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54
L:1152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57
L:1212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60
L:1215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60
L:1274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63
L:1277 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63
L:1332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66
L:1390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69
L:1447 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:1506 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75
L:1567 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78
L:1626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81
L:1685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84
L:1741 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87
L:1800 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:90
L:1859 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93
L:1915 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96
L:1990 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99
L:1993 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99
L:2068 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102
L:2071 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102
L:2087 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103
L:2090 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103
L:2150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106
L:2209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109
L:2212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109
L:2274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:112

VERIFICATION SUMMARY

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Input Set : A:\2314-242.ST25.txt
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L:2332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:115
L:2389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:118
L:2392 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:118
L:2451 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121